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**FAX TRANSMISSION COVER SHEET****Date:** June 14, 2006**To:** Timothy J. Kugel  
US Patent and Trademark Office**Phone:** (571) 272-1460  
**Fax:** (571) 273-8300**From:** Bruce H. Cottrell  
LC/IP**Phone:** (505) 667-9168  
**Fax:** (505) 665-4424**Re:** 10/715,733  
S-102,311  
Melissa A. Petruska**Sender:** Marcie A. Archuleta

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**Comments:**

**Included in this facsimile transmittal are the following documents for filing in the above-identified patent application:**

**Amendment/Response (11 pages)**  
**References cited in amendment (9 pages)**  
**Fee Transmittal (1 page)**

**Fee Payments Authorized: \$1,020.00**

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002

JUN 14 2006

Rev. 02/02/06

FEE TRANSMITTAL For FY 2006 <small>Patent fees are subject to annual revision</small>		Complete If Known	
TOTAL AMOUNT OF PAYMENT: \$1020		Application Number:	10/715,733
		Filing Date:	11/17/2003
		First Named Inventor:	Melissa A. Petruska
		Examiner Name:	Timothy J. Kugel
		Group/Art Unit:	1712
		Attorney Docket No.:	S-102,311

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)																																																																																										
<p>1. <input checked="" type="checkbox"/> The commissioner is hereby authorized to charge indicated fees and credit any over payments to:            Deposit Account Number: 12-2150            Deposit Account Name: Los Alamos National Laboratory  <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 C.F.R. 1.16 and 1.17</p>	<p>3. ADDITIONAL FEES</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; font-size: small;">Large Entity Fee Code</th> <th style="text-align: left; font-size: small;">Fee Description</th> <th style="text-align: right; font-size: small;">Fee Paid</th> </tr> </thead> <tbody> <tr><td>1051 \$130</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052 \$50</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>1812 \$2520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>1251 \$120</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>1252 \$450</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>1253 \$1020</td><td>Extension for reply within third month</td><td>1020</td></tr> <tr><td>1254 \$1590</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>1255 \$2160</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>1401 \$500</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1402 \$500</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>1403 \$1000</td><td>Request for oral hearing</td><td></td></tr> <tr><td>1452 \$500</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>1814 \$110</td><td>Terminal Disclaimer</td><td></td></tr> <tr><td>1453 \$1500</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>1460 \$130</td><td>Petitions to the Director</td><td></td></tr> <tr><td>1806 \$180</td><td>Submission of Information Disclosure Statement</td><td></td></tr> <tr><td>1809 \$790</td><td>Filing a submission after final rejection (37 CFR 1.129 (a))</td><td></td></tr> <tr><td>1810 \$790</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td>1811 \$100</td><td>Certificate of Correction</td><td></td></tr> <tr><td>1504 \$300</td><td>Publication fee for early, voluntary, or normal publication/Republication fee</td><td></td></tr> <tr><td>1801 \$790</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td colspan="2">Other fee (specify) _____</td><td></td></tr> <tr> <td style="text-align: right;"><b>SUBTOTAL (3)</b></td> <td></td> <td style="text-align: right;"><b>\$1020</b></td> </tr> <tr><td colspan="3">Reduced by Basic Filing Fee Paid</td></tr> <tr> <td style="text-align: right;"><b>SUBTOTAL FROM 1</b></td> <td></td> <td style="text-align: right;"><b>\$0</b></td> </tr> <tr> <td style="text-align: right;"><b>SUBTOTAL FROM 2</b></td> <td></td> <td style="text-align: right;"><b>\$0</b></td> </tr> <tr> <td style="text-align: right;"><b>SUBTOTAL FROM 3</b></td> <td></td> <td style="text-align: right;"><b>\$1020</b></td> </tr> <tr> <td style="text-align: right;"><b>TOTAL AMOUNT OF PAYMENT</b></td> <td></td> <td style="text-align: right;"><b>\$1020</b></td> </tr> <tr> <td colspan="3">(Enter total amount at top of page)</td> </tr> </tbody> </table>	Large Entity Fee Code	Fee Description	Fee Paid	1051 \$130	Surcharge - late filing fee or oath		1052 \$50	Surcharge - late provisional filing fee or cover sheet		1812 \$2520	For filing a request for reexamination		1251 \$120	Extension for reply within first month		1252 \$450	Extension for reply within second month		1253 \$1020	Extension for reply within third month	1020	1254 \$1590	Extension for reply within fourth month		1255 \$2160	Extension for reply within fifth month		1401 \$500	Notice of Appeal		1402 \$500	Filing a brief in support of an appeal		1403 \$1000	Request for oral hearing		1452 \$500	Petition to revive - unavoidable		1814 \$110	Terminal Disclaimer		1453 \$1500	Petition to revive - unintentional		1460 \$130	Petitions to the Director		1806 \$180	Submission of Information Disclosure Statement		1809 \$790	Filing a submission after final rejection (37 CFR 1.129 (a))		1810 \$790	For each additional invention to be examined (37 CFR 1.129(b))		1811 \$100	Certificate of Correction		1504 \$300	Publication fee for early, voluntary, or normal publication/Republication fee		1801 \$790	Request for Continued Examination (RCE)		Other fee (specify) _____			<b>SUBTOTAL (3)</b>		<b>\$1020</b>	Reduced by Basic Filing Fee Paid			<b>SUBTOTAL FROM 1</b>		<b>\$0</b>	<b>SUBTOTAL FROM 2</b>		<b>\$0</b>	<b>SUBTOTAL FROM 3</b>		<b>\$1020</b>	<b>TOTAL AMOUNT OF PAYMENT</b>		<b>\$1020</b>	(Enter total amount at top of page)		
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<p>2. EXTRA CLAIM FEES/APPLICATION SIZE FEE</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; font-size: small;">Total Claims</th> <th style="text-align: left; font-size: small;">Extra Claims</th> <th style="text-align: left; font-size: small;">Fee from Fee Paid Below</th> </tr> </thead> <tbody> <tr><td>20** =</td><td>X</td><td>\$</td></tr> <tr><td>Independent</td><td>-3** = X</td><td>\$</td></tr> <tr><td>Claims</td><td></td><td></td></tr> <tr><td>Multiple Dependent</td><td>X 180</td><td>\$</td></tr> </tbody> </table> <p>** or number previously paid, if greater; For Reissues, see below</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; font-size: small;">Large Entity Fee</th> <th style="text-align: left; font-size: small;">Fee Description</th> </tr> </thead> <tbody> <tr><td>1202 \$50</td><td>Claims in excess of 20</td></tr> <tr><td>1201 \$200</td><td>Independent claims in excess of 3</td></tr> <tr><td>1203 \$360</td><td>Multiple dependent claim, if not paid.</td></tr> <tr><td>1204 \$200</td><td>Reissue independent claims in excess of 3 over original patent</td></tr> <tr><td>1205 \$50</td><td>Reissue claims in excess of 20 over original patent</td></tr> <tr><td colspan="2" style="text-align: right;">Total Claims Fee \$ 0</td></tr> </tbody> </table> <p><b>APPLICATION SIZE FEE</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; font-size: small;">1081 \$250</th> <th style="text-align: left; font-size: small;">For each additional 50 sheets that exceed 100 sheets, including specification and drawings</th> </tr> </thead> <tbody> <tr><td colspan="2"></td></tr> </tbody> </table> <p style="text-align: right;"><b>SUBTOTAL (2) \$ 0</b> (Include total of Claims Fees and Size Fee here)</p>	Total Claims	Extra Claims	Fee from Fee Paid Below	20** =	X	\$	Independent	-3** = X	\$	Claims			Multiple Dependent	X 180	\$	Large Entity Fee	Fee Description	1202 \$50	Claims in excess of 20	1201 \$200	Independent claims in excess of 3	1203 \$360	Multiple dependent claim, if not paid.	1204 \$200	Reissue independent claims in excess of 3 over original patent	1205 \$50	Reissue claims in excess of 20 over original patent	Total Claims Fee \$ 0		1081 \$250	For each additional 50 sheets that exceed 100 sheets, including specification and drawings			<p>1. <b>COMBINED FILING FEE</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; font-size: small;">Large Entity</th> <th style="text-align: left; font-size: small;">Small Entity</th> <th style="text-align: left; font-size: small;">Fee Description</th> <th style="text-align: right; font-size: small;">Fee Paid</th> </tr> </thead> <tbody> <tr><td>1001 \$300</td><td></td><td>Basic Filing fee</td><td>\$</td></tr> <tr><td>1004 \$300</td><td></td><td>Reissue Filing fee</td><td>\$</td></tr> <tr><td>1111 \$500</td><td></td><td>Search Fee</td><td>\$</td></tr> <tr><td>1311 \$200</td><td></td><td>Examination Fee</td><td>\$</td></tr> <tr><td>1005 \$200</td><td></td><td>Provisional Filing Fee</td><td></td></tr> <tr><td>1085 \$250</td><td></td><td>Provisional Size Fee (for each additional 50 sheets that exceeds 100 sheets)</td><td></td></tr> <tr><td colspan="3" style="text-align: right;"><b>SUBTOTAL (1)</b></td><td style="text-align: right;"><b>\$0</b></td></tr> </tbody> </table>	Large Entity	Small Entity	Fee Description	Fee Paid	1001 \$300		Basic Filing fee	\$	1004 \$300		Reissue Filing fee	\$	1111 \$500		Search Fee	\$	1311 \$200		Examination Fee	\$	1005 \$200		Provisional Filing Fee		1085 \$250		Provisional Size Fee (for each additional 50 sheets that exceeds 100 sheets)		<b>SUBTOTAL (1)</b>			<b>\$0</b>																									
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SUBMITTED BY		Complete (if applicable)	
Printed Name:	Bruce H. Cottrell	Reg. No.	30,620
Signature:	<i>Bruce H. Cottrell</i>	Date:	6/14/06
		Telephone	(505) 667-9168

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JUN 14 2006

Rev. 06/04/04

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Melissa A. Petruska

Docket No.: S-102,311

Serial No.: 10/715,733

Examiner: Timothy J. Kugel

Filed : 11/17/2003

Art Unit: 4376

For : NANOCRYSTAL/SOL-GEL NANOCOMPOSITES

Customer No. 35068

Mall Stop Amendment  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450AMENDMENT/RESPONSE

Sir:

In response to the Office Action dated December 14, 2005, please enter the following amendments to the Specification and Claims, and consider the accompanying remarks.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

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CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

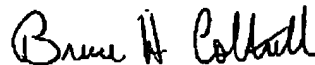
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## FACSIMILE

☐ transmitted by facsimile to the United States Patent and Trademark Office



Signature

Date June 14, 2006

Bruce H. Cottrell

(type or print name of person certifying)

06/15/2006 TL0111 00000030 122150 10715733

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